

## CLAIMS:

1. A method of creating an application map for applying agricultural products to a field, the method comprising:
  - receiving agricultural data;
  - creating field attribute maps based on the agricultural data;
  - creating a crop input requirement maps based on the field attribute maps and recommendation equations; and
  - creating application maps based on the crop input requirement maps and product information.
2. The method of claim 1 wherein creation of the application maps is further based on a paid-for status of the application maps.
3. The method of claim 1 wherein creation of the application maps is further based on a unique set of data tags.
4. The method of claim 1 wherein the agricultural data is collected from the field and an application controller.
5. The method of claim 1 wherein creating the field attribute maps further comprises cleansing and validating the data such that it has a uniform format and is associated with correct latitude and longitude.
6. The method of claim 1 wherein creating the field attribute maps further comprises storing the agronomic data in a data storage system.
7. The method of claim 1 wherein creating the field attribute maps further comprises converting latitude and longitude coordinates of the agronomic

8. The method of claim 1 wherein creating the crop input requirement maps further comprises storing the recommendation equations and field attribute maps in a data storage system.

9. The method of claim 1 wherein creating the application maps further comprises storing the product information and crop input requirement maps in a data storage system.

11. The method of claim 1 wherein creating the application map further comprises decrementing a deposit account based on the paid-for status of the map.

12. A system for generating an application map for applying agricultural products to a field, the system comprising:

a programmable processor for creating field attribute maps based on the agricultural data, and creating an crop input requirement maps based on the field attribute maps and recommendation equations, and creating an application map based on the crop input requirement maps and product information.

13. The system of claim 12 wherein the application map is further based on a paid-for status of the application map.
14. The system of claim 12 wherein the application map is further based on a unique set of data tags.
15. The system of claim 12 wherein the agricultural data is collected from the field and an application controller.
16. The system of claim 12 wherein the programmable processor is also used for cleansing and validating the data such that it has a uniform format and is associated with correct latitude and longitude.
17. The system of claim 12 and further comprising a storage system for storing the agronomic data.
18. The system of claim 12 wherein the programmable processor is also used for converting latitude and longitude coordinates of the agronomic data to a two-dimensional grid format, such that the entire field is broken into multiple grid cells.
19. The system of claim 12 and further comprising a storage system for storing the recommendation equations and field attribute maps.
20. The system of claim 12 and further comprising a storage system for storing the product information and crop input requirement maps in a data storage system.

21. The system of claim 12 wherein creating the application map is also based on user preferences.
22. The system of claim 12 wherein creating the application map further comprises decrementing a deposit account based on the paid-for status of the map.
23. The system of claim 12 wherein creating the application map further comprises updating the paid-for-status of the map.
24. A system for generating an application map for applying agricultural products to a field, the system comprising:
  - an input device for receiving agricultural data; and
  - a programmable processor including:
    - a first program for creating field attribute maps based on the agricultural data;
    - a second program for creating crop input requirement maps based on the field attribute maps and recommendation equations;
    - a third program for creating a demo application map based on the crop input requirement maps and product information; and
    - a fourth program for creating a controller application map based on the demo application map and a paid-for status of the application map.
25. The system of claim 24 wherein the agricultural data is collected from the field and an application controller.

26. The system of claim 24 wherein the programmable processor is also used for cleansing and validating the data such that it has a uniform format and is associated with correct latitude and longitude.

27. The system of claim 24 and further comprising a storage system for storing the agronomic data.

28. The system of claim 24 wherein the programmable processor is also used for converting latitude and longitude coordinates of the agronomic data to a two-dimensional grid format, such that the entire field is broken into multiple grid cells.

29. The system of claim 24 and further comprising a storage system for storing the recommendation equations and field attribute maps.

30. The system of claim 25 and further comprising a storage system for storing the product information and crop input requirement maps in a data storage system.

31. The system of claim 25 wherein creating the demo application map is also based on user preferences.

32. The system of claim 24 wherein creating the controller application map further comprises decrementing a deposit account based on the paid-for status of the map.

33. The system of claim 24 wherein creating the controller application map further comprises updating the paid-for-status of the map.

34. A mapping system for creating an application map, the mapping system comprising:

- a data validation system for cleansing and validating incoming agricultural data;
- a prescription mapping system for creating a prescription of crop inputs for designated sections of a field;
- a customer data management system for inputting and organizing customer data;
- a product-prescription management system for inputting and manipulating recommendation equations and product information;
- a spatial data management system for storing relational and spatial data; and
- a map charging system for managing the payment of the controller application map.

35. The mapping system of claim 34 and further comprising a planning system for establishing field boundaries and crop zones and creating yield goals.

36. The mapping system of claim 34 and further comprising a data transfer system for sharing data with other software systems.

37. The mapping system of claim 34 and further comprising a base data management system for inputting and managing public agricultural data.

38. The mapping system of claim 34 and further comprising a user-preference system for defining user preferences.

39. The mapping system of claim 34 and further comprising a decision support and analysis system for reporting and mapping agricultural data.

40. A prescription mapping system for creating an application map, the system comprising:

a user-interface for interacting with the prescription mapping system;

a prescription builder for creating a plan for accessing a plurality of software modules;

a plurality of data modelers for retrieving information from a database;

a data modeler sequencer for accessing the plurality of data modelers;

a conformation module for converting the information into a grid  
format;

a data access component for retrieving the information stored in the grid format;

a recommendation equation module for creating a prescription of  
crop input;

a spatial blending module for creating a blend of agricultural products; and

a map data translator for converting the blend of agricultural products into instructions used by an application machine to control the release of products to a field.

41. The prescription mapping system of claim 40 and further comprising a sequencer for implementing the plan established by the prescription builder.

42. The prescription mapping system of claim 40 and further comprising an image file server for transforming the information into a graphical format.
43. The prescription mapping system of claim 40 wherein the prescription of crop inputs created by the recommendation equation module is based on recommendation equations and agricultural data.
44. The prescription mapping system of claim 40 wherein the blend of agricultural products created by the spatial blending module is based on the prescription of crop inputs, product information, and user preferences.
45. The prescription mapping system of claim 40 wherein the plurality of data modelers includes a nutrient modeler for handling soil sampling information.
46. The prescription mapping system of claim 40 wherein the plurality of data modelers includes a yield modeler for handling harvest information.
47. The prescription mapping system of claim 40 wherein the plurality of data modelers includes a yield goal modeler for handling yield goal information.
48. The prescription mapping system of claim 40 wherein the plurality of data modelers includes a soil survey modeler for handling soil analysis.
49. The prescription mapping system of claim 40 wherein the plurality of data modelers includes an as-applied modeler for handling information obtained during the application of agricultural products.



50. The prescription mapping system of claim 40 wherein the plurality of data modelers includes an external data modeler for handling public agricultural information.

For review